

Abstract

Grant Number: 1 X01 MH077604-01

PI Name: MUSTELIN,TOMAS

PI Email: TMUSTELIN@BURNHAM.ORG

PI Title: PROGRAM DIRECTOR, PROFESSOR

Project Title: HTS for LYP inhibitors-an autoimmunity target

Abstract: DESCRIPTION (provided by applicant): The goal of the present application is to submit our screen-ready, 96-well, colorimetric phosphatase assay and the needed 16.7 mg of high-quality LYP protein for HTS by the MLSCN. We would prefer the MLSCN screening facility at The Burnham Institute, because we have carried out HTS here before, but we believe that any MLSCN facility could carry out this very simple screen. We anticipate a hit rate of 0.02-0.1 % and are prepared to analyze, counter screen, and further optimize these hits into specific and selective inhibitors of LYP. These inhibitors will be used for studies of LYP in the regulation of Src and Syk kinases, T cell activation, and will be used to explore whether LYP inhibitors will be useful for treatment of autoimmune disease associated with the LYP*W620 allele. Our work on LYP is supported by grant R01 AI53585, which is active until the end of 2007. This grant does not include funds for drug development, but if the HTS by the MLSCN is successful, we will focus the competitive renewal of R01 AI53585 on this task.

Thesaurus Terms:

*High throughput screening, MLSCN colorimetric phosphatase assay, LYP protein, Src kinase, Syk kinase, T cell activation, autoimmune disease, LYP*W620 allele,*

Institution: BURNHAM INSTITUTE FOR MEDICAL RESEARCH
10901 NORTH TORREY PINES ROAD
LA JOLLA, CA 92037

Fiscal Year: 2006

Department: PROGRAM OF SIGNAL TRANSDUCTION

Project Start: 2006/02/01

Project End: 2007/01/31

ICD: NATIONAL INSTITUTE OF MENTAL HEALTH

IRG: ZMH1